

In the Claims:

Please cancel claims 1, 2, 5-8, 17 and 19 and amend the remaining claims as follows:

Claims 1-2 (Canceled)

3. (Currently amended) An isolated polynucleotide according to claim 20 or 21
~~encoding the heavy chain or the heavy chain variable region of a chimeric or humanized~~
~~antibody or antibody fragment according to claim 1 or 2~~, comprising sequences encoding at
least two rWI2 heavy chain CDRs, selected from the group of CDRs consisting of:
the complementary determining region -1 (CDR-1) sequence NYWMT,
the complementary determining region -2 (CDR-2) sequence SITSTGGTYHAESVKG, and
the complementary determining region -3 (CDR-3) sequence DDYGGQSTYVMDA.

4. (Currently amended) An isolated polynucleotide according to claim 20 or 21
~~encoding the light chain or the light chain variable region of a chimeric or humanized~~
~~antibody or antibody fragment according to claim 1 or 2~~, comprising sequences encoding at
least two rWI2 light chain CDRs, selected from the group of CDRs consisting of:
the complementary determining region -1 (CDR1) sequence RASQDIGNYLR,
the complementary determining region -2 (CDR2) sequence GATNLAA, and
the complementary determining region -3 (CDR3) sequence LHHSEYPYT.

5-8. (Canceled)

9. (original) An isolated expression vector comprising a first gene for the WI2 heavy chain
and second gene for the WI2 light chain.

10. (original) An isolated expression vector according to claim 9 wherein said light and
heavy chains are chimeric or are humanized.

11. (original) A host comprising said expression vector according to claim 9.
12. (original) An isolated first expression vector comprising a gene for WI2 heavy chain and an isolated second expression vector comprising a gene for the WI2 light chain.
13. (original) An isolated first and second expression vectors according to claim 12, wherein said genes are for chimeric or humanized WI2 light and heavy chain.
14. (original) A host comprising said first and second expression vectors according to claim 12
15. (Currently amended) A method of stimulating an immune response in a patient against cancers expressing carcinoembryonic antigen, which comprises administering to said patient an effective amount of a vaccine comprising the humanized anti-idiotypic antibody or antibody fragment encoded by the nucleic acid of claim 2 21, conjugated to a soluble immunogenic carrier protein, optionally in combination with a pharmaceutically acceptable vaccine adjuvant.
16. (Currently amended) In a method of diagnosis or treatment of a patient, wherein an antibody or antibody fragment that specifically binds CEA is used as a targeting, pre-targeting or therapy agent, either as such or as a component of a conjugate,
the improvement wherein an anti-idiotypic antibody encoded by the nucleic acid according to claim 2 21 is used to clear non-targeted antibody or antibody fragment.
17. (Canceled)
18. (original) A method according to claim 16, wherein said anti-idiotypic antibody or antibody fragment is labeled with a radiolabel, an enzyme, or a fluorescent agent.
19. (Currently amended) A vaccine, comprising the humanized anti-idiotypic antibody or antibody fragment encoded by the nucleic acid of claim 2 21, conjugated to a soluble

immunogenic carrier protein, for use in stimulating an immune response in a patient against a cancer characterized by expression of CEA.

20. (new) A nucleic acid encoding a chimeric anti-idiotypic antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds to the idiotype region of an anti-CEA monoclonal antibody comprising the rWI2 light chain and heavy chain variable regions.

21. (new) A nucleic acid encoding a humanized anti-idiotypic antibody or fragment thereof, wherein said antibody or fragment thereof specifically binds the idiotype region of an anti-CEA monoclonal antibody comprising rWI2 CDR regions and humanized FR regions.